

**Figure 1****SEQ ID NO:1**

<u>MGWTMRLVTAALLGLMMVVTGDEEDENS</u> PCAHEALLDEDTLFCQGLEVFYPELGNIGCKV	60
<u>VPDCNNYRQKITSWMEPIVKFP</u> GAVDGATYILVMVDPDAPSRAEPRQRFWRHVLVTDIKG	120
<u>ADLKEGKIQGQELSAQAPSPPAHS</u> GFHRYQFFVYLQEGKVISLLPKENKTRGSWKMDRF	180
<u>LNRFHLGEPEASTQFMTQNYQDS</u> PTLQAPRERASEPKHKNQAEIAAC	227

**SEQ ID NO:2**

<u>DEDENS</u> PCAHEALLDEDTLFCQGLEVFYPELGNIGCKVVPDCNNYRQKITSWMEPIVKFP	60
<u>GAVDGATYILVMVDPDAPSRAEPRQRFWRHVLVTDIKGADLKEGKIQGQELSAQAPSPP</u>	120
<u>AHS</u> GFHRYQFFVYLQEGKVISLLPKENKTRGSWKMDRFLNRFHGEPEASTQFMTQNYQD	180
<u>SPTLQAPRERASEPKHKNQAEIAAC</u>	205

**SEQ ID NO:3**

<u>MGWTMRLVTAALLGLMMVVTGDEEDENS</u> PCAHEALLDEDTLFCQGLEVFYPELGNIGCKV	60
<u>VPDCNNYRQKITSWMEPIVKFP</u> GAVDGATYILVMVDPDAPSRAEPRQRFWRHVLVTDIKG	120
<u>ADLKEGKIQGQELSAQAPSPPAHS</u> GFHRYQFFVYLQEGKVISLLPKENKTRGSWKMDRF	180
<u>LNRFHLGEPEASTQFMTQNYQDS</u> PTLQAPRGRASEPKHKT	223

**SEQ ID NO:4**

<u>DEDENS</u> PCAHEALLDEDTLFCQGLEVFYPELGNIGCKVVPDCNNYRQKITSWMEPIVKFP	60
<u>GAVDGATYILVMVDPDAPSRAEPRQRFWRHVLVTDIKGADLKEGKIQGQELSAQAPSPP</u>	120
<u>AHS</u> GFHRYQFFVYLQEGKVISLLPKENKTRGSWKMDRFLNRFHGEPEASTQFMTQNYQD	180
<u>SPTLQAPRGRASEPKHKT</u> RRR	201

**SEQ ID NO:5**

<u>ITSWMEPIVK</u>	10
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**SEQ ID NO:6**

<u>FPGAVDGATYILVMVDPDAPS</u> R	22
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**SEQ ID NO:7**

<u>HWLVTDIK</u>	8
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**SEQ ID NO:8**

<u>IQGQELSAQAPSPPAHS</u> GFH	22
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**SEQ ID NO:9**

<u>YQFFVYLQEGK</u>	11
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**SEQ ID NO:10**

<u>VISLLPK</u>	7
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**Figure 2**

## CLUSTAL W (1.81) multiple sequence alignment

PEBP_HUMAN	-----PVDLSKWSGPLSIQEVDDEQPQHP-----	-----LHVTYGAAVDELGK
PEBP_BOVIN	-----PVDLSKWSGPLSIQEVDERPQHP-----	-----LQVKYGGAEVDELGK
Q96S96	<u>MGTMTMRLVTTAALLLIGLMMVVGTGDEDENSSPCAHEA</u> LLDEDTLFCQGLEVFYP--ELGNIGC	*****
PEBP_HUMAN	VLTPTQVKNRPTTSISWDG-----LDSGKLYTLYLTD <del>DAPS</del> RKDPKYREWHFLVVM	*****
PEBP_BOVIN	VLTPTQVKNRPTTSITWDG-----LDPGKLYTLYLTD <del>DAPS</del> RKDPKYREWHFLVVM	*****
Q96S96	KVVPDCNNYRQKITS <del>SM</del> MEPIVKFPGA <del>VDG</del> ATYILVMVDPDAPSRAEPRQR <del>FW</del> HWLVTDI	*****
PEBP_HUMAN	KGNDI <del>SS</del> -----TVLSDYVGSGPPKG <del>T</del> <u>GLHRYVWLVYEQDRPLKCDEPILSNRGDHRGK</u>	*****
PEBP_BOVIN	KGNNI <del>SS</del> -----TVLSDYVGSGPPKG <del>T</del> <u>GLHRYVWLVYEQEGPLKCDEPILSNRGDHRGK</u>	*****
Q96S96	KGDLKEGKIQQQELSAYQAPSPPAHS <u>G</u> FHRYQFFVYLOEGKVIS----LLPKENKTRGS	*****
PEBP_HUMAN	*****	*****
PEBP_BOVIN	*****	*****
Q96S96	*****	*****
PEBP_HUMAN	FKVASFRKKYELRAPVAGTCYQAEWDDYVPKLYEQLSGK-----	*****
PEBP_BOVIN	FKVASFRKKYELGAPVAGTCYQAEWDDYVPKLYEQLSGK-----	*****
Q96S96	WKMDRFLNRFHLGEPEASTQFMNTQNYQDSPTLQAPRERASEPKHKNQAEIAAC	*****

**Figure 3**

CLUSTAL W (1.81) multiple sequence alignment

Figure 4

